Howatt Robert (DOS)

From:

Jen Adkins [jenadkins@comcast.net] Thursday, March 22, 2007 10:22 PM

Sent: To:

Nickerson Karen J (DOS); Howatt Robert (DOS)

Subject:

Comments on Proposal Evaluations

Dear Ms. Nickerson and Mr. Howatt,

I understand that comments are being accepted on the Evaluations of Proposals for Long-Term Supply Contracts for New Electric Generation Resources in Delaware and are hoping you'll accept mine in the form of this email, which I'll keep brief. I'm writing to express my support for the Bluewater Wind proposal based on the conclusions of the evalation reports, and to urge the Commission to take into consideration the intangible benefits of the Bluewater Wind option.

The State of Delaware has a tremendous opportunity to advance the energy efficiency not just of our state but our country, and to foster an enormous amount of goodwill (and possibly even tourism) in the process.

Have you seen all of the windmills in TV commercials these days? If companies are using windmills to sell products, what do you think that could do for the State of Delaware?

It's understandable that Conectiv's proposal would score highest in terms of viability since it basically involves the same technology that we've been using for years -- and that has been problematic in terms of both pollution and cost instability -- aren't we looking for something better? Not every place has the offshore wind resources that we do here in Delaware -- we are priveleged to have this option and, I think, obliged to our country and the world to explore it to its full potential. Let's not miss this opportunity.

Given these intangible benefits along with all of the environmental benfits of windpower and the very small estimated price difference to the consumer between the Conectiv and Bluewater Wind options, going with windpower seems like the best choice. My 15-year old niece recently told me, "Someday I'd like to build something GREAT here in Delaware, that everyone would want to come see" -- I don't think she had a windfarm in mind. But based on Willet Kempton's public survey work showing overwhelming support for an offshore windfarm among Delawareans, I know I'm not alone in how proud I would feel to know that Delaware is forwarding this important (and clean) technology.

Thank you for taking my comments into consideration in the PSC's evaluation process, which I will continue to follow.

Jennifer Adkins 1403 Gilpin Ave., #2 Wilmington, DE 19806 (302)426-9925

John Austin Comment - March 22, 2007

The following comments have not been listed in the record.

Also not in the record is the special education data provided at Georgetown. It is attached.

John Austin <austin4102000@yahoo.com> wrote:

Date: Thu, 22 Mar 2007 13:29:39 -0700 (PDT) From: John Austin sustin4102000@yahoo.com

Subject: Final Analysis Comments

To: Philip.Cherry@state.de.us, karen nickerson < karen.nickerson@state.de.us >,

Russell.Larson@state.de.us, charlie.smisson@state.de.us,

Jennifer.Davis@state.de.us, Robert Howatt <robert.howatt@state.de.us>,

Jack Markell <jack.markell@state.de.us>, ltgov@state.de.us,

leeann walling <leeann.walling@state.de.us>

In my past career as a scientist and national expert working on hazardous waste regulations for US EPA's Office of Solid Waste, I was called upon many times to condense complex issues to the simplest terms possible, and to identify the key issues upon which the larger decision hinges. The following is my assessment of the power bid procurement.

At the end of any complex decision-making process, there comes a time to review the guiding principles upon which the decision must be framed. In the power purchase, I believe the guiding principles to be framed by three questions:

- 1. Are the bids an efficient use of natural resources?
- 2. Are the bids viable?
- 3. What is the best for the people of the State of Delaware?

Are the bids an efficient use of natural resources?

While wind represents an untapped natural resource, natural gas is at the other extreme. Natural gas is a dwindling resource, prone to the wild price spikes of any supply disruption. Future reliance on this power source, the grid, and conservation to make up Delaware's future needs is ill advised.

Does the IGCC bid represent efficiency in the use of natural resources? I conclude it does NOT. As best that can be deciphered, the facility has a net generation capacity of 400MW, but a 630MW gross generation capacity. In essence, the plant burns the coal of a 630MW standard facility, but it can only provide 63.5% of the power. Where does the other 230MW go? It goes to thermally break down the coal, and to power the parasitic gas separation and compressors needed for sequestration. The bid explained only a 50MW drop to run the compressors for sequestration. Over one-third of coal used will be lost to the chemical process needed to generate electricity and power the unit's operation. Even if there were 60% carbon dioxide sequestration, the equivalent emissions of a new 252MW unit will go unabated.

Are all the bids viable?

I conclude one bid is not viable.

The Coastal Zone Regulation exempts <u>only repair and maintaince</u> of electrical generation facilities (provided such repair or maintaince does not result in any negative environmental impacts). The addition of a new unit is not repair or maintaince, but the conversion of the facility to a new use, which is a combined electric generation and chemical production complex. http://www.durec.state.dc.us/development/CZA/czregs.pdf

The regulation expressly prohibits the conversion of an existing unregulated, exempted, or permitted facility to a heavy industry use. (D.3 page 6) Can an IGCC Unit be permitted at all under Delaware's Coastal Zone Act?

Heavy industry uses of any kind not in operation on June 28, 1971, are prohibited in the coastal zone and no permits may be issued therefore. § 7003

"Heavy industry use" means a use characteristically involving more than 20 acres, and characteristically employing some but not necessarily all of such equipment such as, but not limited to, smokestacks, tanks, distillation or reaction columns, chemical processing equipment, scrubbing towers, pickling equipment and waste-treatment lagoons; which industry, although conceivably operable without polluting the environment, has the potential to pollute when equipment malfunctions or human error occurs. Examples of heavy industry are oil refineries, basic steel manufacturing plants, basic cellulosic pulp-paper mills, and chemical plants such as petrochemical complexes. § 7002 (emphasis added)

An integral part of an IGCC complex is the Claus Unit. The Claus unit is a "chemical plant" used to convert hydrogen sulfide to elemental Sulfur. This process unit is a "heavy industry use" and is typically employed at petrochemical facilities. Thus, while there may be expansion of the existing electrical production if there are pollution reductions in excess of those demanded by existing regulation, the addition of a Claus Unit is not and hence an IGCC is not permitted. Furthermore, the IGCC will utilize some 70 acres of land (Volume 1, page 128).

Therefore, I submit that the NRG IGCC bid is not in conformance with Delaware law. It is invalid for any consideration by the PSC. It would not be legal to build such a facility in the coastal zone. No permit would be obtainable. NRG's bid should have been accorded zero points for site development, and zero points in the project viability category - or NRG's bid should be outright disqualified.

Can the Gas Plant be built in Delaware's Coastal Zone? Similar problems exist for Conectiv's Hay Road site. There again, environmental offsets from existing regulations are needed. These facilities cannot offer up the emission reductions needed to comply with existing regulations, as their fulfillment of the offset requirements for expansion under the separately applicable Coastal Zone Act. (Redacted Form I at 6; note NOx reductions. SO2 reduction is also needed.)

The addition of yet another major source to either Millsboro or Edge Moor also raises environmental justice considerations not addressed in the bids. Thus, site development at EdgeMoor/Hay Road must receive some further deduction in points. I attribute no points, a deduction of 5.

In summary, I conclude the "project viability" score for Gas should be revised to 63.9, and the NRG bid should be disqualified.

How should the total 47 points for price and environmental factors be awarded?

The PSC is now left with a Wind Bid of average wholesale costs calculated by its consultants at \$98.21/MWh and the Conectiv Gas Bid calculated at \$87.48/MWh. However, according to the Conectiv proposal, the Gas Bid's actual rate is to be determined later. How can the Gas Bid be attributed full points? What deduction should be made for future price uncertainties?

If I stay with wholesale costs and add in the "hidden cost" factors[1] now, the costs are Gas \$100.59/ MWh and Wind \$99.81/MWh. Wind is cheaper than gas.

In the price and environmental areas a total of 47 points could be awarded (33 for price and 14 for environmental factors). Currently, the consultant awarded Gas 33+10.3= 43.3 points and Wind 8.3+12.2=20.5 points. The disparity shown is simply not there. The overall costs are just

too similar. If both were scored equally, the final score would be Wind 79.8 and Gas 63.9. Any further deduction for future uncertainty is now moot. Wind is now far ahead of the other bids. The decision hinges of whether or not the monthly current billed costs are accorded the same weight as hidden medical and environmental costs. As we are the ones paying, I can assure you they are of the same impact. Thus, we are left at the final question.

What is the best for the people of the State of Delaware?

In my assessment, Wind proposal is best, because of its price stability, potential economic benefits, and minimal environmental impact. Wind is the best match to the requirements of HB6.

If there were one thing that could make this project even more favorable, it would be for the PSC to limit the markup for the wholesale price of the power to be purchased by the retail customer. At present with deregulation that markup is estimated to be 25%. That is excessive and should be limited.

Thank you,

John J. Austin Rehoboth Beach

[1] See the European Report on External Cost of Energy at http://www.externe.info/expoltec.pdf

- Gas CC 1.31 US cents/kwh, or 13.11 US cents/Mwh
- Wind offshore 0.16 US cents/kwh or 1.60 US cents/Mwh

Special Education Enrollments 2005 Eastern MD Counties & Delaware School Districts

200	5		
Maryland	% Special Education	Delaware	% Special Education
Cecil	14.6	Brandywine	9.57
Baltimore	12.9	Colonial	11.84
City of			
Baltimore	17.1	Red Clay	10.61
Kent	14.5	Christina	14.63
Queen			
Anne's	13.2	Appoquinimink	9.91
Prince		11001111	40.04
George's	11.5	NCC Votech	12.01
Calvert	12.9	Smyrna	12.52
Charles	8.5	Polytech	7.57
St Mary's	13.2	DFAB	6.32
		Capital	16.23
		Caesar Rodney	15.66
Talbot	10	Lake Forest	12.25
Caroline	12.1	Milford	12.61
		Cape Henlopen	14,61
		Indian River	16.05
Dorchester	10.8	Woodbridge	9.88
		Seaford	14.07
Wicomico	12.2	Laurel	12.01
Somerset	12.7	Delmar	10.61
Worcheste	r 10.6	Sussex Tech	9.70

For Sussex County 2005 there were 21,897 enrolled children with 3046 in Special Education. Of these Sp Ed students, 2181 are learning disabled, and 163 are autistic.

That is 31 more that the national autistic rate of 1 per 166. (Both Kent & New Castle are below the national Average.)

Based on the incidence in Woodbridge District, the rest of Sussex County has 883 more children in special education than would be predicted.

References:

- DE Dept of Education: Information: Education Reports & Statistics Jan. 22, 2007, State Board of Education, Schools & Districts,
 Education Reports & Statistics, School Curriculum, Educator Certification, State Code, Administrative Code. U.S. Dept of Education DE
 School Enrollment Reports http://www.doe.k12.de.us/info/reports/enrollment.shtml
- DE Dept of Education http://www.doc.k12.de.us/files/dedoe_enrollment.xls
- MD State Dept of Ed., Div. of Accountability & Assessment, 200 W. Baltimore St, Baltimore, MD 21201-2595, (410) 767-0063 MSDE-DSE/EIS 03/06 http://www.marylandpublicschools.org/NR/rdonlyres/85E7723B-CB82-46B0-AD4B-EAD45A69B4F2/9627/sped07.pdf

The data is in the docket of Reg 1146 & was conveyed to the Governor, and DHHS & DNREC Secretaries.

Observations confirmed in peer reviewed study of Texas School Districts downwind of power plants. http://www.awm.delaware.gov/NR/rdonlyres/3B571C5A-080A-43D7-A3F2-032AE9748BD7/780/palmer_et_al.pdf

Howatt Robert (DOS)

From:

John Austin [austin4102000@yahoo.com]

Sent:

Friday, March 30, 2007 6:35 PM

To:

Howatt Robert (DOS); Nickerson Karen J (DOS)

Subject:

Fwd: Final Analysis Comments

Attachments: 3764127051-Special_Education_Enrollments_hand.doc

The following comments have not been listed in the record.

Also not in the record is the special education data provided at Georgetown. It is attached.

John Austin <austin4102000@yahoo.com> wrote:

Date: Thu, 22 Mar 2007 13:29:39 -0700 (PDT) From: John Austin sustin4102000@yahoo.com

Subject: Final Analysis Comments

To: Philip.Cherry@state.de.us, karen nickerson < karen.nickerson@state.de.us>,

Russell.Larson@state.de.us, charlie.smisson@state.de.us,

Jennifer.Davis@state.de.us, Robert Howatt <robert.howatt@state.de.us>,

Jack Markell <jack.markell@state.de.us>, ltgov@state.de.us,

leeann walling <leeann.walling@state.de.us>

In my past career as a scientist and national expert working on hazardous waste regulations for US EPA's Office of Solid Waste, I was called upon many times to condense complex issues to the simplest terms possible, and to identify the key issues upon which the larger decision hinges. The following is my assessment of the power bid procurement.

At the end of any complex decision-making process, there comes a time to review the guiding principles upon which the decision must be framed. In the power purchase, I believe the guiding principles to be framed by three questions:

- 1. Are the bids an efficient use of natural resources?
- 2. Are the bids viable?
- 3. What is the best for the people of the State of Delaware?

Are the bids an efficient use of natural resources?

While wind represents an untapped natural resource, natural gas is at the other extreme. Natural gas is a dwindling resource, prone to the wild price spikes of any supply disruption. Future reliance on this power source, the grid, and conservation to make up Delaware's future needs is ill advised.

Does the IGCC bid represent efficiency in the use of natural resources? I conclude it does NOT. As best that can be deciphered, the facility has a net generation capacity of 400MW, but a 630MW gross generation capacity. In essence, the plant burns the coal of a 630MW standard facility, but it can only provide 63.5% of the power. Where does the other 230MW go? It goes to thermally break down the coal, and to power the parasitic gas separation and compressors needed for sequestration. The bid explained only a 50MW drop to run the compressors for sequestration. Over one-third of coal used will be lost to the chemical process needed to generate electricity and power the unit's operation. Even if there were 60% carbon dioxide sequestration, the equivalent emissions of a new 252MW unit will go

unabated.

Are all the bids viable?

I conclude one bid is not viable.

The Coastal Zone Regulation exempts only repair and maintaince of electrical generation facilities (provided such repair or maintaince does not result in any negative environmental impacts). The addition of a new unit is not repair or maintaince, but the conversion of the facility to a new use, which is a combined electric generation and chemical production complex. http://www.dnrec.state.de.us/development/CZA/czregs.pdf

The regulation expressly prohibits the conversion of an existing unregulated, exempted, or permitted facility to a heavy industry use. (D.3 page 6) Can an IGCC Unit be permitted at all under Delaware's Coastal Zone Act?

Heavy industry uses of any kind not in operation on June 28, 1971, are prohibited in the coastal zone and no permits may be issued therefore. § 7003

"Heavy industry use" means a use characteristically involving more than 20 acres, and characteristically employing some but not necessarily all of such equipment such as, but not limited to, smokestacks, tanks, distillation or reaction columns, chemical processing equipment, scrubbing towers, pickling equipment and waste-treatment lagoons; which industry, although conceivably operable without polluting the environment, has the potential to pollute when equipment malfunctions or human error occurs. Examples of heavy industry are oil refineries, basic steel manufacturing plants, basic cellulosic pulp-paper mills, and chemical plants such as petrochemical complexes. § 7002 (emphasis added) An integral part of an IGCC complex is the Claus Unit. The Claus unit is a "chemical plant" used to convert hydrogen sulfide to elemental Sulfur. This process unit is a "heavy industry use" and is typically employed at petrochemical facilities. Thus, while there may be expansion of the existing electrical production if there are pollution reductions in excess of those demanded by existing regulation, the addition of a Claus Unit is not and hence an IGCC is not permitted. Furthermore, the IGCC will utilize some 70 acres of land (Volume 1, page 128). Therefore, I submit that the NRG IGCC bid is not in conformance with Delaware law. It is invalid for any consideration by the PSC. It would not be legal to build such a facility in the coastal zone. No permit would be obtainable. NRG's bid should have been accorded zero points for site development, and zero points in the project viability category - or NRG's bid should be outright disqualified.

Can the Gas Plant be built in Delaware's Coastal Zone? Similar problems exist for Conectiv's Hay Road site. There again, environmental offsets from existing regulations are needed. These facilities cannot offer up the emission reductions needed to comply with existing regulations, as their fulfillment of the offset requirements for expansion under the separately applicable Coastal Zone Act. (Redacted Form I at 6; note NOx reductions. SO2 reduction is also needed.)

The addition of vet another major source to either Millsboro or Edge Moor also raises environmental justice considerations not addressed in the bids. Thus, site development at EdgeMoor/Hay Road must receive some further deduction in points. I attribute no points, a deduction of 5.

In summary, I conclude the "project viability" score for Gas should be revised to 63.9, and the NRG bid should be disqualified.

How should the total 47 points for price and environmental factors be awarded? The PSC is now left with a Wind Bid of average wholesale costs calculated by its consultants at \$98.21/MWh and the Conectiv Gas Bid calculated at \$87.48/MWh. However, according to the Conectiv proposal, the Gas Bid's actual rate is to be determined later. How can the Gas Bid be attributed full points? What deduction should be made for future price uncertainties? If I stay with wholesale costs and add in the "hidden cost" factors[1] now, the costs are Gas \$100.59/ MWh and Wind \$99.81/MWh. Wind is cheaper than gas.

In the price and environmental areas a total of 47 points could be awarded (33 for price and 14 for environmental factors). Currently, the consultant awarded Gas 33+10.3= 43.3 points and Wind 8.3+12.2=20.5 points. The disparity shown is simply not there. The overall costs are just too similar. If both were scored equally, the final score would be Wind 79.8 and Gas 63.9. Any further deduction for future uncertainty is now moot. Wind is now far ahead of the other bids. The decision hinges of whether or not the monthly current billed costs are accorded the same weight as hidden medical and environmental costs. As we are the ones paying, I can assure you they are of the same impact. Thus, we are left at the final question.

What is the best for the people of the State of Delaware?

In my assessment, Wind proposal is best, because of its price stability, potential economic benefits, and minimal environmental impact. Wind is the best match to the requirements of HB6.

If there were one thing that could make this project even more favorable, it would be for the PSC to limit the markup for the wholesale price of the power to be purchased by the retail customer. At present with deregulation that markup is estimated to be 25%. That is excessive and should be limited.

John J. Austin

Thank you,

Rehoboth Beach

[1] See the European Report on External Cost of Energy at http://www.externe.info/expoltec.pdf

- Gas CC 1.31 US cents/kwh, or 13.11 US cents/Mwh
- Wind offshore 0.16 US cents/kwh or 1.60 US cents/Mwh

The fish are biting.

Get more visitors on your site using Yahoo! Search Marketing.

TV dinner still cooling? Check out "Tonight's Picks" on Yahoo! TV.

Special Education Enrollments 2005 Eastern MD Counties & Delaware School Districts

2005				
Maryland	% Special Educatio	n	Delaware	% Special Education
Cecil		14.6	Brandywine	9.57
Baltimore	•	12.9	Colonial	11.84
City of				
Baltimore	•	17.1	Red Clay	10.61
Kent	•	14.5	Christina	14.63
Queen		400		2.24
Anne's	·	13.2	Appoquinimink	9.91
Prince George's	,	11.5	NCC Votech	12.01
Calvert		12.9	Smyrna	12.52
			-	
Charles		8.5	Polytech	7.57
St Mary's	•	13.2	DFAB	6.32
			Capital	16.23
			Caesar Rodney	15.66
Talbot		10	Lake Forest	12.25
Caroline	•	12.1	Milford	12.61
			Cape Henlopen	14.61
			Indian River	16.05
Dorcheste	ſ	8.01	Woodbridge	9.88
			Seaford	14.07
Wicomico	•	12.2	Laurel	12.01
Somerset	•	12.7	Delmar	10.61
Worcheste	r 1	0.6	Sussex Tech	9.70

For Sussex County 2005 there were 21,897 enrolled children with 3046 in Special Education. Of these Sp Ed students, 2181 are learning disabled, and 163 are autistic.

That is 31 more that the national autistic rate of 1 per 166. (Both Kent & New Castle are below the national Average.)

Based on the incidence in Woodbridge District, the rest of Sussex County has 883 more children in special education than would be predicted.

References:

- DE Dept of Education: Information: Education Reports & Statistics Jan. 22, 2007, State Board of Education, Schools & Districts,
 Education Reports & Statistics, School Curriculum, Educator Certification, State Code, Administrative Code. U.S. Dept of Education DE
 School Enrollment Reports http://www.doe.k12.de.us/info/reports/enrollment.shtml
- DE Dept of Education http://www.doe.k12.de.us/files/dedoe_enrollment.xls
- MD State Dept of Ed., Div. of Accountability & Assessment, 200 W. Baltimore St, Baltimore, MD 21201-2595. (410) 767-0063 MSDE-DSE/EIS 03/06 http://www.marylandpublicschools.org/NR/rdonlyres/85E7723B-CB82-46B0-AD4B-EAD45A69B4F2/9627/sped07.pdf

The data is in the docket of Reg 1146 & was conveyed to the Governor, and DHHS & DNREC Secretaries.

Observations confirmed in peer reviewed study of Texas. School Districts downwind of power plants. http://www.awm.delaware.gov/NR/rdonlyres/3B571C5A-080A-43D7-A3F2-032AE9748BD7/780/palmer_et_al.pdf

Delmarva Power RFP State of Delaware Public Service Commission April 5, 2007

Testimony of Gail Charnley, PhD1

I am pleased to be able to submit this supplemental testimony supporting the oral testimony I presented to the Commission at its hearings in Georgetown on March 8th and in Wilmington on March 12th, 2007. I am writing this testimony on behalf of Americans for Balanced Energy Choices (ABEC), whose members support clean, modern coal technology as an important part of moving toward our country's energy independence, but my opinions are my own. I am not affiliated with NRG and NRG is not a member of ABEC. I base this testimony on my PhD in toxicology from MIT, my 30 years of experience as a risk assessor studying the relationships between chemical exposures and public health, and on my experiences as director of the Toxicology and Risk Program at the National Academy of Sciences, as executive director of the bipartisan Presidential/Congressional Commission on Risk Assessment and Risk Management, and as president and lifetime fellow of the international Society for Risk Analysis.

I am not supporting any particular choice in terms of where Delaware gets its electricity; such decisions are complex and based on many factors. However, I believe it is important to be able to consider supportable, factual scientific information as you evaluate Delaware's electricity generation choices. There are four rumors in particular that are often found on the internet associated with coal-based electricity generation, many of which were repeated at the public hearings in March, that I would like to refute with scientific evidence. All of my statements are supported with citations to scientific literature or to federal government data and reports.

 $^{^1}$ HealthRisk Strategies, Washington DC, chamley@healthriskstrategies.com

Rumor #1: Mercury from power plants is poisoning our children.

Fifty percent of the electricity in the US is produced by burning coal.² US women's mercury levels are below those that might have effects on babies.³ Most of our mercury exposure comes from fish⁴ and most fish comes from outside the US.⁵ Studies show that the potential threats from current levels of mercury exposure are outweighed by the benefits of fish.⁶ It is thus unlikely that US coal-based power plants are poisoning our children.

The form of mercury of health concern is methylmercury,⁷ not the mercury that comes out of power plants. Most of the mercury that comes out of power plants is carried up into the upper atmosphere but some of it can be deposited in soil or water close to the plant.⁸ The amount of mercury deposited in soil or water close to the plant depends on the plant and the nature of where it is located. Both mercury and methylmercury also occur naturally in the environment.⁹

² Energy Information Administration, http://www.eia.doe.gov/fuelelectric.html

³ US Centers for Disease Control and Prevention (2005). Third National Report on Human Exposure to Environmental Chemicals. http://www.cdc.gov/exposurereport/

 $^{^4}$ US National Academy of Sciences (2000). Toxicological Effects of Methylmercury. National Academy Press. Washington, DC

⁵ US National Marine Fisheries Service, http://www.st.nmfs.gov/st1/fus/fus03/08_perita2003.pdf

⁶ See, e.g., Hibbeln JR, Davis J. Steer C, Emmett P, Rogers I, Williams C, Golding J (2007). Maternal seafood consumption in pregnancy and neurodevelopmental outcomes in childhood (ALSPAC study): an observational cohort study. Lancet 369:578-585

⁷ op. cit. 4

⁸ US Environmental Protection Agency (2005). Technical Support Document: Methodology Used to Generate Deposition, Fish Tissue Methylmercury Concentrations, and Exposure for Determining Effectiveness of Utility Emission Controls: Analysis of Mercury from Electricity Generating Units. http://www.epa.gov/ttn/atw/utility/eff fnl tsd-031705 corr oar-2002-0056-6301.pdf

⁹ US Environmental Protection Agency (2001). Water Quality Criterion for the Protection of

To pose a threat to children, mercury from any source has to get into water bodies, be converted into methylmercury by microorganisms, and be taken up by fish. Then someone has to catch and eat enough of those particular fish to accumulate high levels of methylmercury. 10 Large, predatory fish like shark contain more methylmercury than smaller kinds of fish due to accumulation effects at each increasing stage of the food chain. 11 Because mercury is a naturally occurring element, the levels of methylmercury in fish can never reach zero; methylmercury has been in fish since there were fish. We are all exposed to methylmercury when we eat fish, shellfish, and marine mammals. 12 The US Environmental Protection Agency (EPA) has estimated that children and women of childbearing age receive about 0.0003% of their total methylmercury exposure from the air, 0.0002-0.0003% from soil, 0% from non-fish food items, and about 99,9995% from fish. 13 Our gastrointestinal tracts contain bacteria that are capable of both forming and detoxifying methylmercury, but endogenous formation has not been demonstrated as a source of exposure. 14 In other words, we may receive trace levels of exposure to methylmercury from sources other than fish, but virtually all of our exposure comes from fish. Inhaling elemental mercury from power plants is not a potential source of methylmercury exposure because the elemental mercury that is emitted from power plants does not become breathable mercury at ground level. 15

Human Health: Methylmercury. http://www.epa.gov/waterscience/criteria/methylmercury/document.html

¹⁰ US Environmental Protection Agency, http://www.epa.gov/mercury/about.htm

¹¹ ibid.

¹² ibid.

¹³ op. cit. 9

¹⁴ op. cit. 4

Vapor phase mercury measurements taken by Electric Power Research Institute and US Geological Survey scientists near power plant stacks at ground level are all consistent with the naturally occurring background concentration of mercury, 1.6 nanograms per cubic meter of air (personal

US coal-based power plants are not the source of most of our exposure to methylmercury from seafood. According to the National Marine Fisheries Service, more than 75% of the fish we eat in the US is imported and half of what we eat comes from a can. Most of our mercury exposure results from eating ocean fish such as tuna and swordfish. According to The Annapolis Center, of those who eat fish in the US, about 10% of the fish they eat comprises freshwater fish, not all of which come from waters near power plants or would be methylmercury-contaminated. Studies show that the amount of mercury in large predatory ocean fish, such as tuna and swordfish, has not changed over the last century despite the increasing contribution of human activity-related mercury emissions to global mercury levels and substantial increases in US mercury deposition. The authors of those studies have concluded that the relatively high levels of methylmercury in ocean fish are likely to result from natural processes in the deep ocean, not 20th century industrial pollution. EPA has concluded that the US general fish-eating population, including recreational fishers, is not at risk from US

communication, Dr. Leonard Levin, Electric Power Research Institute).

¹⁶ op. cit. 5

¹⁷ Carrington CD, Bolger MP (2002). An exposure assessment for methylmercury from seafood for consumers in the United States. Risk Analysis 22:689-699; Dabeka R, McKenzie AD, Forsyth DS, Conacher HB (2004). Survey of total mercury in some edible fish and shell fish species collected in Canada in 2002. Food Additives and Contaminants 21:434-440

¹⁸ Annapolis Center (2003). Mercury in the Environment: The Problems, the Risks, and the Consequences. http://www.annapoliscenter.org

¹⁹ Barber RT, Vijayakumar A, Cross FA (1972). Mercury concentrations in recent and ninety-year-old benthopelagic fish. Science 178:636-639; Miller GE, Rowland FS, Steinkru FJ, Grant PM, Guinn VP, Kishore R (1972). Mercury concentrations in museum specimens of tuna and swordfish. Science 175:1121-1122; Barber RT, Whaling PJ, Cohen DM (1984). Mercury in recent and century-old deep-sea fish. Environmental Science and Technology 18:552-555; Kraepiel AML, Keller K, Chin HB, Malcolm EG, Morel FMM (2003). Sources and variations of mercury in tuna. Environmental Science and Technology 37:5551-5558; Greenfield BK, Davis JA, Fairey R, Roberts C, Crane D, Ichikawa, G (2005). Seasonal, interannual, and long-term variation in sport fish contamination, San Francisco Bay. Science of the Total Environment 336:25-43

Seigneur C, Vijayaraghavan K, Lohman K, Karamchandani P, Scott C (2004). Global source attribution for mercury deposition in the United States. Environmental Science and Technology 38:555-569.

freshwater fish methylmercury attributable to power plants.²¹

Nobody disputes that methylmercury can be toxic to the developing nervous system and if women are exposed to too much of it during pregnancy, it can affect their babies. Potential threats from current levels of methylmercury appear to be outweighed by the benefits of fish, however.²² EPA and the Food and Drug Administration advise pregnant women to eat no more than two fish meals weekly to avoid risks from mercury while enjoying the health benefits of fish.²³ However, a major new government-funded medical study²⁴ has found that English women who ate more than two fish meals weekly during pregnancy were more likely to give birth to children with higher IQs and better social skills than the children of women who ate two meals or less. The English women in this study were exposed to 2-3 times more mercury than US women. This study confirms other studies²⁵ concluding that fish is essential to babics' healthy brain development and that pregnant women who eat more fish have children who perform better than women who eat less fish.

Based on its ongoing biomonitoring survey, the US Centers for Disease Control (CDC) reports that children and women of childbearing age in the US have methylmereury levels in

²¹ US Environmental Protection Agency (2005). Technical Support Document: Methodology Used to Generate Deposition, Fish Tissue Methylmercury Concentrations, and Exposure for Determining Effectiveness of Utility Emission Controls. OAR-2002-0056-6301. Office of Air and Radiation. http://www.epa.gov/ttn/atw/utility/eff_fnl_tsd-031705_corr_oar-2002-0056-6301.pdf

²² op. cit. 6

²³ Department of Health and Human Services and Environmental Protection Agency (DHHS/EPA). 2004. What you Need to Know About Mercury in Fish and Shellfish. http://www.cfsan.fda.gov/~dms/admchg3.html

²⁴ op. cit. 6

²⁵ See, e.g., Myers GJ, Davidson PW, Cox C, Shamlaye CF, Palumbo D, Cernichiari E, Sloane-Reeves J, Wilding GE, Kost J, Huang LS, Clarkson TW (2003). Prenatal methylmercury exposure from ocean fish consumption in the Sevelvelles child development study. Langet 361:1686-1692

their blood well below those that have been reported to produce adverse effects. Exhibit 1 shows that the mercury level that has been reported to affect babies is much higher than the levels of mercury exposure in US women. Exhibit 1 shows (1) measurements of mercury levels in the hair of women near Iceland who ate methylmercury and PCB-contaminated fish and pilot whales and whose children tended to perform more poorly on a memory test as their mothers' exposure to mercury increased; (2) EPA's reference dose, or recommended exposure limit for methylmercury, based on those women; (3) the average mercury level found in the hair of US women of childbearing age tested by the CDC; (4) the upper 90th percentile mercury level in US women of childbearing age; and (5) the mercury level reported for a sample of mothers in Japan. The Japanese data were used by the investigators to calculate that more than 90% of Japanese women have mercury levels that exceed EPA's exposure limit for methylmercury. As far as I know, there is no epidemic of poor neurodevelopmental performance in Japan.

The CDC did find that 5.7% of women tested had blood mercury levels that exceeded EPA's exposure limit, or reference dose, for methylmercury Reference dose is defined by EPA as an estimate of an exposure that is "likely to be without an appreciable risk of adverse effects over a lifetime." Despite assertions to the contrary, women whose exposures exceed EPA's methylmercury reference dose are *not* "at risk" of having developmentally impaired children. EPA is careful to point out that, while exposure at or below a reference dose indicates that a

²⁶ op. cit. 3

²⁷ Grandjean P, Weihe P, White RF, Debes F, Araki S, Yokoyama K, Murata K, Sørensen N, Dahl R, Jørgensen PJ (2001). Cognitive deficit in 7-year-old children with prenatal exposure to methylmercury. Neurotoxicology and Teratology 19:417-428

²⁸ op. cit. 9

²⁹ US Centers for Disease Control (2001). Morbidity and Mortality Weekly Report 50:140

³⁰ ibid.

³¹ Iwasaki Y, Sakamoto M, Nakai K, Oka T, Dakeishi M, Iwata T, Satoh H, Murata K (2003). Estimation of daily mercury intake from seafood in Japanese women: Akita cross-sectional study.

health risk is unlikely, people who are exposed to a substance above its reference dose should not be considered at risk: "... exceeding the [reference dose] is not a statement of risk." US EPA's Regulatory Impact Assessment for the Clean Air Mercury Rule states, "It is also important to note that the [reference dose] does not define a bright line, above which individuals are at risk of adverse effect." In other words, while exposures at or below a reference dose are unlikely to pose a risk, the converse—that exposures exceeding a reference dose are likely to pose a risk—is not the case. The number of children "at risk" is determined by the dose-response relationship, not by the number of people whose doses or blood mercury levels exceed the reference dose at a single point in time.

Rumor #2: Mercury contributes to cardiovascular disease in adults.

The weight of the scientific evidence indicates that the cardiovascular benefits of eating fish greatly outweigh any potential risks from methylmercury.

There is a very large body of evidence demonstrating the important cardiovascular benefits of fish consumption in adults.³⁴ While most of the studies reporting an association between greater fish consumption and fewer cardiovascular effects did not specifically evaluate mercury exposure, it is reasonable to assume that people who eat more fish are exposed to more mercury. The American Heart Association recommends that individuals consume two servings

Tohuku Journal of Experimental Medicine 200:67-73

³² US Environmental Protection Agency (2004). Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds National Academy Sciences (NAS) Review Draft. National Center for Environmental Assessment. Office of Research and Development. Washington, DC. Page 14

³³ US Environmental Protection Agency (2005). *Regulatory Impact Analysis of the Clean Air Mercury Rule*. EPA-452/R-05-003. Office of Air Quality Planning and Standards. Research Triangle Park, NC. Page 9-2

³⁴ See review by Kris-Etherton PM, Harris WS, Appel LJ for the Nutrition Committee of the American Heart Association (2002). Fish consumption, fish oil, omega-3 fatty acids, and cardiovascular disease. Circulation 106:2747-2757

of a variety of fish weekly, both for the benefits of omega-3 fatty acids and because fish tends to be low in saturated fats, which contribute to elevated cholesterol levels.³⁵

A study of Finnish men has been pointed to as evidence that mercury exposure is associated with cardiovascular disease. That study found an association among the highest third of hair mercury content and an approximately 60% greater prevalence of coronary heart and cardiovascular diseases compared to men with the lower two-thirds of hair mercury content.³⁶ Attempts to correlate hair mercury content with fish consumption were tenuous, with only one third of the men in the highest hair mercury group reporting higher fish consumption than the other study participants. Contrary to the large body of epidemiologic evidence showing a negative correlation between fish consumption and heart disease, the population of Eastern Finland has a high rate of heart disease in spite of high fish consumption,³⁷ suggesting that factors other than methylmercury are responsible for elevated risk.³⁸ The Finnish results were considered preliminary by the American Heart Association, which has concluded that when consumed according to established FDA/EPA guidelines, the cardiovascular benefits of eating fish far outweigh the risks for middle-aged and older men and women after menopause.³⁹

³⁵ American Heart Association Dietary Guidelines for Healthy Adults, http://www.americanheart.org/presenter.jhtml?identifier=4561

³⁶ Virtanen JK, Voutilainen S, Rissanen TH, Mursu J, Tuomainen TP, Korhonen MJ, Valkonen VP, Seppanen K, Laukkanen JA, Salonen JT (2005). Mercury, fish oils, and risk of acute coronary events and cardiovascular disease, coronary heart disease, and all-cause mortality in men in Eastern Finland. Arteriosclerosis, Thrombosis, and Vascular Biology 25:222-227

³⁷ Salonen JT, Seppänen K, Nyyssönen K, Korpela H, Kauhanen J, Kantola M, Tuomilehto J, Esterbauer H, Tatzber E, Salonen R (1995). Intake of mercury from fish, lipid peroxidation, and the risk of myocardial infarction and coronary, cardiovascular, and any death in Eastern Finnish men. Circulation 91:645-655

³⁸ Smith KM, Sahyoun NR (2005). Fish consumption: recommendations versus advisories, can they be reconciled? Nutrition Reviews 63:39-46

³⁹ American Heart Association (ΛΗΑ) (2005). Fish, Levels of Mercury and Omega-3 Fatty Acids. http://www.americant/geoglesses/ner/fatty-deadlesses/fish-2012797

Rumor #3: Mercury causes autism and the prevalence of autism is increasing.

There is no scientific basis for concluding that mercury causes autism; the US National Academy of Sciences and many other independent scientific panels have repeatedly found no relationship between autism and mercury based on careful evaluation of studies involving hundreds of thousands of children in a number of countries.⁴⁰

Scientists who study autism at places like Johns Hopkins University and the US Centers for Disease Control⁴¹ have concluded that it is not possible to identify an increase in autism prevalence over time because we do not have data from different years that can be compared. Changing diagnostic criteria, expanded outreach and community services, and improved diagnostic ability prevent meaningful comparisons of today's autism prevalence with that of previous years. In other words, while the number of children identified as autistic has increased, we cannot tell whether the increase is real or an artifact of how and to what extent autism is diagnosed. As described above, scientists have found that the amount of mercury in fish appears to have changed little over time, so even if there were an increase in autism, it's unlikely to be related to mercury levels that haven't changed.

A study was published in 2005 that purported to show a correlation between EPA's Toxic

⁴⁰ National Academy of Sciences (2004). Immunization Safety Review: Vaccines and Autism. National Academy Press. Washington, DC; National Academy of Sciences (2001). Immunization Safety Review: Thimerosal-Containing Vaccines and Neurodevelopmental Disorders. National Academy Press. Washington, DC; American Academy of Pediatrics (2006). Study fails to show a connection between thimerosal and autism. http://www.cdc.gov/nip/vacsafe/concerns/autism/geier-article.pdf; [US Food and Drug Administration] Ball LK, Ball R, Pratt RD (2001). An assessment of thimerosal use in childhood vaccines. Pediatrics 107:1147-1154

US Centers for Disease Control and Prevention (2007). Prevalence of the Autism Spectrum Disorders (ASDSs) in Multiple Areas of the United States, 2000 and 2002. Autism Developmental Disabilities Monitoring Network. Department of Health and Human Services. Atlanta, GA. http://www.ede.gov/ncls/ddd/autism/documents/AutismCommunityReport.pdf

Release Inventory (TRI) reports for mercury and cases of autism in Texas.⁴² The problems with trying to extrapolate the results of that study to a causal association between mercury and autism are many:

- (1) TRI reports are not a surrogate for exposure and no mercury exposure was demonstrated in this study. According to EPA, TRI data reflect chemical management practices, not exposures of the public to those chemicals.⁴³
- (2) Most of the mercury deposited in Texas comes from global sources, which is not reflected by the TRI.
- (3) Neurodevelopmental toxicity can result from too much exposure to methylmercury in fish, which is not reflected by TRI reports in any way. In studies of neurodevelopmental toxicity associated with methylmercury poisoning, autism has not been reported.
- (4) No relationship to power plants was evaluated and there are no scientific reports of autism associated with power plants.
- (5) The most important determinant of autism in the study was urban residence, not mercury TRI reports.

Significantly, the authors of the Texas study themselves state that "a causal association between environmentally released mercury and developmental disorders cannot be determined from this cross-sectional data." Recent scientific studies have established the definitive genetic, heritable nature of autism, 45 which suggests little relationship to environmental exposures at all, much less

⁴² Palmer RF, Blanchard S, Stein Z, Mandell D, Miller C (2005). Environmental mercury release, special education rates, and autism disorder: an ecological study of Texas. Health & Place 12:203-209

⁴³ US Environmental Protection Agency (2002). The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data. http://www.epa.gov/tri/2002 tri brochure.pdf

⁴⁴ op. cit. 42, page 208

⁴⁵ The Autism Genome Project Consortium (2007). Mapping autism risk loci using genetic linkage and chromosomal rearrangements. Nature Genetics Published online 2/28/07

to mercury or power plants.

Rumor #4: Power plants cause cancer.

Despite all the stories floating around the internet, there is no credible scientific evidence that emissions from coal-based power plants in the US are related to cancer. EPA has estimated that cancer risk due to air pollutants from power plants that burn coal is so small it can't be detected (i.e., less than one extra case predicted among every million people exposed).

About 90% of power plant particulate emissions is in the form of sulfate and nitrate salts—such as ammonium sulfate and ammonium nitrate—that form in the atmosphere subsequent to the release of the gases sulfur dioxide and nitrogen oxides.⁴⁷ No one considers those salts to be cancer-causing and clinical evidence indicates that power-plant associated sulfate and nitrate salts are not harmful in any way.⁴⁸ In fact, most asthma medications are supplied as sulfate salts and result in exposures 100 to 1,000 times higher than that associated with power plants.⁴⁹

About 10% of the particulates from coal-fired power plant emissions is primary

⁴⁶ US Environmental Protection Agency (1998). Utility Air Toxics Study Report to Congress. Office of Air and Radiation. http://www.epa.gov/ttn/atw/combust/utiltox/utilexec.pdf

⁴⁷ Levy JL, Spengler D (2002). Modeling the benefit of power plant emission controls in Massachusetts. Journal of the Air & Waste Management Association 52:5-18

⁴⁸ Canadian Environmental Protection Act/Federal/Provincial Working Group on Air Quality Objectives and Guidelines (1999). National ambient air quality objectives for particulate matter. Minister, Public Works and Government Services. ISBN 0-662-26715-X

⁴⁹ Green LC, Crouch EAC, Ames MA, Lash TL (2002). What's wrong with the National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM 2.5)? Regulatory Toxicology and Pharmacology 35:327-337

particulate matter,⁵⁰ which includes trace amounts of residue from air pollution control devices, metals, other inorganic compounds, elemental carbon (soot), and very small levels of numerous organic chemicals (as products of incomplete combustion). At ambient concentrations, none of these is expected to be toxic. In contrast, a Harvard School of Public Health study predicted that nine old-fashioned coal-based power plants in Northeastern Illinois—an area that has a high concentration of airborne particulates and has always been out of attainment with EPA's limit on particulate pollution—could contribute 3% to the background levels of fine particulates downwind of the plants, potentially adding to the background burden of disease.⁵¹ Sussex County has never been out of attainment with EPA's health-based limit on particle pollution, however,⁵² so cannot be compared to the area modeled in the Harvard study. In any case, the study authors themselves state, "Our analysis cannot be directly applied in other settings."

Evaluation of coal fly ash by US and international regulatory agencies charged with protecting public health has resulted in the conclusion that fly ash does not pose risks to human health, including cancer. Furthermore, EPA, the US Department of Energy, and other agencies charged with environmental and public health protection throughout the world promote the beneficial use of coal fly ash through recycling as a component of cement and of road and building construction materials. Coal ash has been used in construction in the United States since the 1940s. Recycling fly ash saves energy and reduces carbon dioxide emissions (associated with global warming). Building construction materials made from coal fly ash are considered "green" because their use replaces potentially toxic materials and reduces the energy

⁵⁰ op. cit. 47

Levy J, Spengler J (2000). Health benefits of emissions reductions from older power plants. Center for Risk Analysis. Harvard School of Public Health. Risk in Perspective 9(2):1-4

⁵² US Environmental Protection Agency. AirData. Emissions by Category Report. Criteria Air Pollutants. http://www.epa.gov/air/data/emcatrep.html?st~DE~Delaware

⁵³ See, e.g., 58 Fed. Reg. 42466 (US EPA); Directive 94/901/EC (European Union)

⁵⁴ See US EPA's Coal Combustion Products Partnership website,

required to manufacture them. Coal fly ash can also help improve agricultural yields and can be used as a pollution control agent, particularly for soil decontamination, sludge and effluent treatment, and in hazardous waste stabilization.⁵⁵

In a 1988 report to Congress, EPA reviewed coal combustion wastes from electric power plants, concluding that they do not exhibit hazardous characteristics and that regulating them under the Resource Conservation and Recovery Act as hazardous wastes was unnecessary. The report also encouraged the beneficial use of coal fly ash. That finding was supported by regulatory determinations in 1993 and 1999. As part of those determinations, EPA specifically evaluated whether coal combustion wastes pose a "significant risk" to human health by assessing their intrinsic hazards and the likelihood of exposure via groundwater ingestion, particle inhalation, or soil ingestion. An initial screening analysis ruled out soil ingestion as an exposure pathway of concern. EPA evaluated risks via air or groundwater using a more detailed analysis involving widely accepted risk assessment methods to characterize intrinsic hazard, dose-response relationships, and exposure characteristics that rely on conservative, health-protective assumptions to ensure the protection of public health. EPA concluded that health risks from inhalation were negligible and that the potential for actual human exposure via groundwater is very limited (and so, therefore, risks to health are also very limited).

http://www.epa.gov/epaoswer/osw/conserve/e2p2/index.htm

⁵⁵ US Environmental Protection Agency, Federal Highway Administration, US Department of Energy, American Coal Ash Association, Utilities Solid Wastes Activities Group (2005). Using Coal Ash in Highway Construction: A Guide to Benefits and Impacts. EPA-530-K-05-002. Coal Combustion Products Partnership. Washington, DC

⁵⁶ US Environmental Protection Agency (1988). Report to Congress: wastes from the combustion of coal by electric utility power plants. USEPA 530-SW-88-002. Office of Solid Waste and Emergency Response. Washington, DC

⁵⁷ 58 Fed. Reg. 42466; 65 Fed. Reg. 32214

⁵⁸ ibid.

At the public hearings, a "draft EPA report" was referenced as providing evidence that EPA believes that cancer risk from coal ash "lagoons" is 1 in 100 (i.e., one extra person out of every 100 people exposed for their lifetimes will develop cancer). This assertion is seriously misleading for several reasons. The "draft EPA report" was allegedly obtained from Earthjustice, an environmental advocacy organization that includes what it refers to as a "draft risk assessment" for coal combustion waste on its website. That "draft risk assessment" turns out to be three slides (such as would be prepared for a powerpoint presentation) that include no mention of EPA, have some material redacted (presumably that which is inconsistent with Earthjustice's advocacy viewpoint), do not mention a 1 in 100 cancer risk, refer to a total of only 17 cases of groundwater damage out of 600 coal ash disposal facilities (3%!), and state that the risk modeling results are "similar to the analyses conducted for the Regulatory Determination." As described above, the 1993 and 1999 regulatory determinations specifically evaluated whether coal combustion wastes pose a "significant risk" to human health, concluded that they do not, and determined that regulating coal ash as hazardous waste is unnecessary. The alleged "draft risk assessment"—if it is one, which is unlikely—is thus consistent with previous risk assessments for coal ash and does not conclude that coal ash disposal poses a cancer risk.

On several occasions the assertion has been made that cancer incidence data for the zip codes downwind of the plant show higher rates of all cancers and lung cancers than the zip codes that are not downwind of the plant. That conclusion cannot be made on the basis of those data, however, for two important reasons. The numbers of cancers are too few and the numbers of residents are too small to provide any statistically meaningful comparative inferences. Even if meaningful comparison were possible, it would not be valid without controlling for all the other factors that are known to influence cancer incidence and could account for any differences, such as smoking, diet, socioeconomic status, amount of time spent indoors versus outdoors, residence time, etc.

⁵⁹ ibid.

Conclusion

Critical evaluation of the scientific literature related to emissions from coal-based power plants does not support a relationship with cancer, autism, cardiovascular disease, or neurodevelopmental toxicity in the United States. In any case, modern IGCC technology with carbon sequestration would reduce emissions of all sorts dramatically compared to old power plants. Coal will continue to play an important role in affordable and reliable electricity generation in the US.



CHRISTIAN | BARTON, LRECEIVED

Attorneys At Law

Michael J. Quinan

07 MAR 26 相相: / 两quinan@cblaw.com DELAWARE P.S.C.

Direct Dial: (804) 697-4149 Direct Fax: (804) 697-6149

March 22, 2007

VIA OVERNIGHT MAIL

Karen Nickerson Commission Secretary Delaware Public Service Commission 861 Silver Lake Boulevard Cannon Building, Suite 100 Dover, DE 19904

Re:

In the Matter of Integrated Resource Planning for the Provision of Standard Offer Supply Service By Delmarva Power & Light Company Under 26 Del. C. § 1007(c) & (d); Review and Approval of the Request for Proposals for the Construction of New Generation Resources Under 26 Del. C. § 1007(d)

(Opened July 25, 2006) PSC Docket No.: 06-241

Dear Ms. Nickerson:

Enclosed please find an original and fifteen copies of Comments of the Delaware Energy Users Group on the Delmarva RFP Bid Evaluation Reports to be filed in the above-referenced matter. A motion and certification for admission pro hac vice for Michael J. Quinan is currently being executed and is expected to be filed with the Commission within the next several days.

Thank you for your kind attention to this request.

Sincerely yours,

MJO/wcv Enclosure

Anthony Wilson

Todd L. Goodman

18097.00003/806067

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF DELAWARE

IN THE MATTER OF INTEGRATED)	
RESOURCE PLANNING FOR THE PROVISION	1)	
OF STANDARD OFFER SERVICE BY)	
DELMARVA POWER & LIGHT COMPANY)	
UNDER 26 Del. C. § 1007(c) & (d): REVIEW)	PSC Docket No. 06-241
AND APPROVAL OF THE REQUEST FOR)	
PROPOSALS FOR THE CONSTRUCTION OF)	
NEW GENERATION RESOURCES UNDER)	
26 Del. C. § 1007(d) (OPENED JULY 25, 2006))	

COMMENTS OF THE DELAWARE ENERGY USERS GROUP ON THE DELMARVA RFP BID EVALUATION REPORTS

These comments are submitted by the Delaware Energy Users Group ("DEUG") pursuant to the Public Service Commission's ("Commission's") Order No. 7131, issued in this matter on February 6, 2007.

DEUG represents the largest industrial customers of Delmarva Power & Light Company ("Delmarva"), including E. I. du Pont de Nemours and Company, General Motors Corp, Daimler Chrysler, Perdue Farms, Burris Logistics and FMC Corporation. The members of DEUG are not only among the most sizable users of electricity in Delaware, but also some of the biggest employers in the state. In order for the economy of the State of Delaware to remain healthy, it is essential that its industry remain competitive; and for industrial customers to remain competitive it is essential that they be able to obtain power at fair and reasonable rates.

Consequently, DEUG has a critical interest in this proceeding, and urges the Commission and other State Agencies to accept the recommendation of Delmarva and reject all three proposals to construct new generation that are under consideration.

This docket was initiated pursuant to 26 Del. C. § 1007(d), which directed Delmarva to issue a request for Proposal ("RFP") for the construction of new generation sources within

Delaware, subject to approval and modification by the Commission and the Delaware Energy Office. (26 Del. C. § 1007(d)(1).) The statute further required that the Commission, the Energy Office, the Director of the Office of Management and Budget, and the Controller General (collectively, the "State Agencies") retain the services of an independent third-party entity (the "Independent Consultant" or "IC") to oversee the development of the RFP and to assist in review of resulting proposals. (26 Del. C. § 1007(d)(2).) The statute now provides that the State Agencies shall evaluate such proposals and "may determine" to approve one or more of them. (26 Del. C. § 1007(d)(3).)

Three bids were received in response to the RFP: (1) Conectiv Energy proposes to construct a combined cycle, primarily natural gas-fired, generator at its existing Hay Road site in New Castle County, Delaware; (2) Bluewater Wind, LLC proposes to construct an offshore wind park east of either Rehoboth or Bethany Beach, Delaware; and (3) NRG Energy, Inc. proposes to construct an Integrated Gasification Combined Cycle, coal-fired, generation facility at its existing Indian River site in Millsboro, Delaware.

Both Delmarva and the IC evaluated the three bids, and both Delmarva and the IC have issued their evaluation reports. Both reports rank the Conectiv proposal as being the most favorable of the three. The Delmarva Evaluation Report, however, also clearly establishes that none of the three proposals would satisfy the requirements of its proposed Integrated Resource Plan, which is currently being considered by the State Agencies pursuant to 26 Del. C. § 1007(c). Consequently, Delmarva recommends that all three bids be rejected. Although the IC has not yet issued its final recommendation, its analysis supports Delmarva's conclusions.

The statute, 26 Del. C. § 1007(d), does not require that the State Agencies approve any proposal, and does not evidence any legislative intent that the "build option" should be favored.

It merely identifies a number of different factors that should be considered, and then provides that the State Agencies "may determine" to approve one or more, to the extent that such proposals "result in the greatest long-term system benefits . . . in the most cost-effective manner." (26 Del. C. § 1007(d)(3).) Of course, if none of the proposals would result in cost-effective, long-term system benefits, then none of them should be approved.

In order to identify the particular objectives that the RFP statute seeks to obtain, the RFP process must necessarily be considered in the greater context of the IRP process. In fact, RFP statute begins with these words: "As part of the initial IRP process, " (26 Del. C. § 1007(d).) The IRP requirement is established by the preceding subsection of the statute, found at 26 Del. C. § 1007(c). Clearly, the principal purpose of the IRP process is to require Delmarva "to meet its customers' needs at a minimal cost." (26 Del. C. § 1007(c)(1).) Although the other factors listed in the RFP statute must also be considered in the IRP process, ultimately Delmarva is directed to investigate all potential opportunities to diversify its supply "at the lowest reasonable cost." (26 Del. C. § 1007(c)(1)b.) Both the language of the statute, and the context in which it was enacted, leave no doubt that the principal objective of both the IRP process and the RFP process is to reduce costs in order to address the steep rate increases recently experienced by electric customers. The approval of any new generation project that would increase costs would stand the statute on its head.

This is not to say that the other factors identified in the statutes, such as rate stability, fuel diversity, environmental impact, the utilization of new and emerging technologies, are insignificant. These issues are given detailed analysis in both of the Evaluation Reports. But clearly, in Delaware's current situation given energy costs and rates, they should not be elevated

to the point that the basic objective of the statute – to reduce both costs and rates – is not only defeated, but the situation actually made worse.

In fact, numerous complex issues have been raised and debated in the town hall meetings and in the written comments that have already been submitted. The bidders, in particular, will provide detailed analysis and strong opinions. They have complained about the transparency of the process and the fairness of the methodology that have been employed. The State Agencies, however, should not be distracted. The bottom line is that all of these issues are irrelevant in the absence of evidence that any of the proposed projects would lower rates. The principal issue, and the one that should control the State Agencies' decision at this stage of the process, is the effect that the proposed generation projects would have on the rates that customers in Delaware pay for their electric service. Other issues are secondary.

Delmarva's Report clearly establishes that each of the proposed projects would increase costs rather than reduce them. In fact, Delmarva's Report concludes that all of the bids increase prices going forward beyond market projections, that none of the bids provides significantly more stable prices for its customers, and that all of the bids introduce significant risks that do not exist in the current SOS process. It is particularly telling that Delmarva is recommending rejection of all three bids, even though the highest-ranked bidder according to both evaluation reports is an affiliated company.

If, despite all of the foregoing, a proposal for new generation was to be accepted for reasons unrelated to minimizing the cost of power, then it would be extremely important that steps be taken to protect the Delaware economy by assigning the higher costs that result appropriately. The RFP statute was intended to determine whether a new generation resource could cost-effectively supply a portion of the needs of the Standard Offer Service ("SOS")

requirements for Delmarva's residential and small commercial/industrial customers. Large industrial customers who do not take generation service from Delmarva, or who take Standard Offer Service at rates designed to permit recovery of Delmarva's cost of purchasing power at competitive wholesale market prices, should not bear the higher cost of a generation project that was approved in order to serve other customers and to suit other purposes. Of course, in light of the conclusions reached in both Delmarva's evaluation report and the IC's evaluation report, it appears very clear that approving any of the proposed projects under consideration would not be in the best interest of any of Delmarva's customers.

While the numerous complex issues that are addressed in the evaluation reports may be debated at length, one thing is clear: all three proposals would increase rather than decrease rates. In the absence of convincing evidence that any of the bids would reduce the rates that Delmarva's customers in Delaware are paying for their electric service - and such evidence is clearly absent - all three bids need to be rejected.

Respectfully submitted,

DELAWARE ENERGY USERS GROUP

Michael J. Quinan, Esq.

Christian & Barton, L.L.P.

909 East Main Street

Richmond, VA 23219-3095

Phone: 804-697-4149

Fax: 804-697-6149

mquinan@cblaw.com

Counsel for the Delaware Energy Users Group

March 22, 2007

#805559

Howatt Robert (DOS)

From: Carol Dobson [caroldob@gmail.com]

Sent: Wednesday, March 21, 2007 2:34 PM

To: Howatt Robert (DOS)

Subject: Fwd: Good Faith Actions by NRG

Dear Mr. Howett:

I see that I omitted a . in your email address and that prevented your receipt of it. This email should reach you.

I would like to add to these comments the following: Is it possible that the PSC could make a determination that NRG should be dismissed from being considered as a bidder based on the behavior of not behaving with good faith? The plant manager's false statements to the public, the fact that NRG is currently in dispute with the State over regulatory requirements and that they now will file suit about the redacted information and whatever else they select...is there a mechanism to be brought to bear by citizens or other state agencies to remove them from the bidding process as unqualified to continue?

Yesterday's meeting was a major saturation experience for all of you and us observing and I'm sure you'll be glad to get some time to restore yourselves. Thank you for all your hard work.

I'd like to know how I can access the public hearing transcripts? Where on the web site is this available?

Sincerely, Carol Dobson

----- Forwarded message -----

From: Carol Dobson < caroldob@gmail.com>

Date: Mar 19, 2007 4:00 PM

Subject: Good Faith Actions by NRG

To: roberthowett@state.de.us

Dear Mr. Howett:

I am writing to bring a very important matter to the attention of the Public Service Commission prior to the hearing at 1:00pm, Tuesday, March 20, 2007. At the close of the Feb. 27th meeting, the PSC Chair, Ms. Arnetta McRae, made an emphatic statement about NRG acting in good faith with regard to releasing redacted information and cooperating fully with the PSC. I was heartened to hear a clear and well-spoken declaration that the PSC would require and settle for nothing less than a genuine show of good faith on the part of this company.

I was disheartended to hear the testimony given at the Public Hearing in Georgetown on March 12th by the plant manager of NRG in which he stated emphatically (and made a strategic use of this large public hearing audience to hear and newspapers to cover, such as The Cape Gazette and News Journal) that the litigation NRG has with the State of Delaware now is only about time tables...that nothing else is being contested by the company. At this same public hearing, several other speakers refuted that

information and Alan Muller even brought documents which set forth the specifics of this litigation with the State of Delaware which he stated would show the falsity of the claim made by the plant manager. Muller requested that these documents be made available to the public on the PSC website. Has this occurred?

Prior to the 1:00pm meeting on March 20th, I urge the PSC to discuss the standard of "good faith" expected, how it will be assessed and this recent conduct by NRG (which inleudes the statements of the plant manager, not just the RFP-involved individuals). The public testimony of the plant manager has brought factual legal matters into the public arena which conflict and deny the truth of the record. I urge the PSC hold NRG accountable "in good faith" with use of the concern expressed in this message to the PSC. The overall assessment of NRG's "good faith" in dealing with the PSC and the public must include this series of events which demonstrate blatant behavior on the part of a high level management official to mislead the public during RFP evaluation hearings.

This behavior by an NRG employee of high management standing is setting a pattern of "bad faith" behavior which I and others will expect the PSC to note and use for evaluation of the merit and integrity of their application as a company to be given possible consideration of a long term a contract for years of service which has an unprecedented multi-generational effect on the well-being of Delaware citizens, visitors and neighbors in surrounding states. While competing values of many stakeholders and disputable scientific information is expected to be reviewed and deliberated for this RFP process, distortion and false statements of information which is a matter of record is inexcusable and grounds for identifying behavior which is not in good faith for review by the PSC and the Delaware public. In this instance integrity can be measured and I urge the PSC to hold NRG accountable to a pattern of behavior which must be included in the deliberations of the evaluation reports.

Sincerely, Carol M. Dobson 33770 Woodland Circle Lewes, DE 19958 3920249-5742

Howatt Robert (DOS)

From: Carol Dobson [caroldob@gmail.com]
Sent: Wednesday, March 21, 2007 3:49 PM

To: Nickerson Karen J (DOS); Howatt Robert (DOS)

Subject: Resending Public Hearing Testimony by Carol Dobson at Georgetown PSC Public Hearing, 3/12/07

Testimony at PSC Public Hearing on 3/12/07, Georgetown, DE by Carol M. Dobson,33770 Woodland Circle, Lewes, DE 19958.

As a nation, our country has failed to limit pollution from coal combustion waste. This failure has produced approximately 129 million tons of the this waste each year. In a 2004 study of the amount of coal ash generated by each state, Delaware generated 121 thousand short tons, of which only 24 short tons or 20% was determined to be used beneficially. This means that 80% of Delaware's coal ash was allowed to harm the public and the environment with toxic chemicals such as mercury, arsenic, lead, cadmium, chromium, and selenium, all known contributors to cancer.

A new EPA Risk Assessment (made public by www.earthjustic.org) finds extraordinary cancer risk from coal ash, the combustion waste generated by coal burning power plants. This new finding reveals that the risk is 10,000 times greater for developing cancer from coal ash than the present government safety standards allow. This means that the EPA's regulatory goals for reducing cancer risks are grossly inadequate for limiting the exposure and protecting the public against the health threats of America's 2nd largest solid waste stream, coal ash.

These new findings are more than frightening, they are disastrous. Right now when we, the citizens of Delaware, find ourselves demanding the PSC require redacted information from the bidders' proposals be provided about emissions levels and full disclosure of the contents of the proposals, we also find out that the EPA's current regulations allow for a concer risk that is 10,000 times greater than what had been thought.

I have a friend who lives in Riverbend Development, 3/4 mile upriver of the Indian River Power Plant, next to Sandy Beach on the same side as the power plant. She couldn't be here tonight and asked me to tell you her experience with coal ash. She says she had no idea she would have black dust and how much of it she would be breathing. In the winter with windows shut she can see black soot inside her house on window sills, on the tops of toilet tanks, and on her miniblinds. In the summer it's much worse with the windows open. One summer eveing she heard an explosion in the middle fo the night and when no fire alarm went off she wondered if it was the power plant. The entire next week there was four times the amount of soot as usual...real fine little specs of soot. She and her neighbors can hear boom in the middle of the night during the summer months and one week there were three or four booms in one week. A neighbor commented to her bad it was. She's concerned about how much she and her family and neighbors are breathing when they dust off their furniture...when they breathe the air in and around their houses. Who can answer her questions?

We can be smart and decide right now that we won't be victims anymore. We won't continue using coal-burning power. We'll use clean, renewable, non-emissions-generating power and be proud to be survivors of this nightmare. I urge the PSC to make the right choice and give renewable, non-polluting wind power a chance...our chance to survive. The costs are just too much for the damage to our health and environment. The benefits of non-polluting power sources may be costly up front, but we

can't afford to wait any longer. Prices for energy can stabilize over time with renewable, clean power. The price of polluting energy sources will never stabilize, they will always be a cost we cannot afford to pay.

Thank you.

Kim Furtado Comment - April 9, 2007

From: Kim Furtado [mailto:npih2001@yahoo.com]

Sent: Monday, April 09, 2007 8:39 AM

To: Schwartzkopf Peter (LegHall); Atkins John (LegHall); Hocker Gerald (LegHall); Booth Joseph (LegHall); Bunting George (LegHall); Nickerson Karen J (DOS); Walling Lee Ann (Governor); Davis Jennifer (OMB); Larson Russell T (LegHall); Smisson Charlie T. (DNREC); Hughes John A. (DNREC); Feedback (MailBox Resources); McDowell Harris (LegHall); Carey George (LegHall); Longhurst Valerie (LegHall); McWilliams Diana (LegHall); Hall-Long Bethany (LegHall); Mulrooney Michael (LegHall); Walls Robert (LegHall); McBride David (LegHall); Peterson Karen (LegHall); gsimpson@udel.edu; Venables Robert (LegHall); Silverman Paul (DHSS)

Cc: Pat Gearity; Austin John; kit Zak; newsroom@capegazette.com; DE State news-editor, sussex post **Subject:** Long term Cost Benefits of Wind must be considered.

Delaware Public Service Commission 861 Silver Lake Boulevard Cannon Building, Suite 100 Dover, DE 19904

Arnetta McRae, Commission Chair Joann Conaway, Commissioner Jaymes Lester, Commissioner J. Dallas Winslow, Commissioner Jeffrey Clark, Commissioner

Bruce Burcat, Executive Director
Connie McDowell, Chief of Technical Services
Karen Nickerson, Commission Secretary (Please copy all the commissioners)

Dear Public Service Commissioners and Governor Minner:

Thank you for allowing the public to participate in this process. The "political chaos" (of the decision before you concerning new power contracts) can be solved by strong leadership from the Governor and your Commission. Your concerns for the public's health and our future welfare has the ability to bring clarity to the decision placed in your hands.

Blatantly absent (or may I concede to "minimal") in the consultant reports is a thorough thought process reflecting on the environmental benefits and health care costs impact of the three bids analyzed. The costs to our health care system, were they to be considered for each of the three bids, would bring clarity to the complex decision making process. Wind power achieves a long term cost benefit by its ability to prevent disease by being non-polluting, period. That long term cost benefit must be acknowleged and properly attributed to this bidders' cost analysis.

Please do not allow the decision to kick back to legislature. Provide the leadership to choose the sustainable power bid we have available to us: BlueWater Wind.

I have four daughters aged 7 to 10. May I suggest you sit down with your knowlege base of the bid process and work out "how" to try to explain it to a child. This forces you to sift through the complexity and find the simplicity. This also has the potential to be sure you include honesty, and respect for their generation's future needs to be considered.

It can go something like this. Delmarva Power has been asked by the legislators to find a suitable long term contract for buying power. This started because there were large raises in prices in the market, mostly because of higher costs of fossil fuels, like natural gas. There are also known future cost, like carbon taxes, that will be added to coal and natural gas, which will continue to raise the prices. So we want to try to stabilize the costs; but the details of that are enough to make everyone think this is a complicated decision. The legislators also did mention they want environmental benefits to be part of the deal.

So three companies put in bids to Delmarva Power, who is the company that will buy the power from one of these power generators. But that "buying" company is saying that they think the market can do a better job in controlling costs than buying blocks of power at a set cost now. One bidder sells natural gas power, the other coal gasification power, and the other wind power. They have submitted all their data and information and everyone is trying to do their best to sort it out; but mostly they are still talking about cost and future concerns that are hard to predict.

I like to pretend it is like they are all sitting down playing a game of Monopoly. All the pieces are laid out, and the game is underway. But some of the players who get told they are in "last place" begin to wonder if they can win if they are competing with a new player, such as wind power, who does not have future fuel cost increases nor costs of pollution as part of its bid reality. The old players begin to realize the way they can "win" is to change the game or try to control it better, (for example by supporting changes in the bid process, changing who makes the decisions or working to get a contract another way, instead of competing with renewables).

So, what is happening now, it can be like a seven year old who gets frustrated with the game as she begins to percieve she may lose, and she goes to pick up the whole board and knocks it overto ruin the game and let no one win. What the children who desire to do this need is parenting or leadership- lessons applied at fair sportsmanship and clear direction as to process and rules.

Yes, monopoly is a game of strategy and power, and this is a part of life. But we can lead, teach and insist that the game is most honorably played when rules and "power monopolies" are not in charge of making the rules as we go. Delmarva Power seems to not have any financial gain by the sale of wind, but may have business benefits from the sale or prosperity of natural gas sales. There is nothing wrong with wanting Delmarva Power to prosper and succeed. However, the game of monopoly is changing, not because we should allow the players to control the game. That game is changing because renewables are now a player in the viability of a large power source, and cost effectiveness, and cost stability.

The future "stability" we seek, in price and in environmental benefit, can be seen in the eyes of visionaries who support the development of sustainable renewable energy industry. There are risks or unknowns to any new technology. But there are "inconvenient truths" or realities to the risks of **not** choosing to support the development of large scale renewables power industry- such as the proposed large off shore wind farm.

It will take leadership from Governor Minner to not allow the players to tip over the board and send the decision back. We need visionary leadership, one who keeps the players fair and one who keeps the peoples' health and welfare in position of priority over power executive profit margins concerns.

A very simple understanding of the health care costs and direct impacts each bid may have on the costs to the health care system in the future has the ability to solve the riddle of complexity imbedded into this bid process.

We all wish to know the future, and we don't want a long term contract that will end up costing us more now than power in the future may cost. The power monopoly would like us to focus mostly on cost parameters related to the company's profits or losses, future risks or gains.

However, as decisions are made about the future cost parameters, the people deserve that the game is fairly played and the benefits to people (their budgets and their health), not just companies' profits, are considered.

Consider the asthma patients, the heart disease patients, and the cancer patients whose disease processes are affected by the levels of pollution in our world. If you apply even a small fraction of the costs of their health care, and then also add consideration and brave thought processes that their rights to health deserve a factor of consideration, you will find clarity. Long term cost benefits of wind power INCLUDE the costs saved in health care by disease prevention from non-polluting power sources.

Allowing political chaos and "no-bid" to prevail is a subtle way you tell the public that their health concerns are **not** your priority. And "we" are paying attention to see what are your priorities: the peoples' needs or the power executives desires?

(By "we", I refer to those public members who have testified and have no financial connections to any of the bids.)

Choose the disease-free power contract: Choose Blue Water Wind's bid. Your leadership has a chance to shine on behalf of the people of Delaware.

Thank you for respecting our health concerns and finding clarity in your process with this awareness.

Kim Furtado, N.D. 35252 Hudson Way, Unit 2 Rehoboth Beach DE 19971 April 2, 2007

Arletta McRae, Chair Delaware Public Service Commission 861 Silver Lake Boulevard Dover DE 19904 OTAPR 3

DELAWARE P.S.C.

PISANTIPUTE & file in Public Record -

Dear Chair McRae & fellow Commissioners:

According to the News Journal, NRG's Indian River plant, the Conectiv Hay Road operation and the Valero refinery produced a combined 73% of all toxic chemicals for Delaware in 2005. The three plants emit 6,130,000 pounds of toxic pollutants annually. These pollutants contribute directly to increased levels of ground level ozone. Delaware is graded "F" for ground level ozone by the American Lung Association. Sustained exposure to ozone pollution inflames the lungs. It alters elasticity of lung tissue. Ozone reduces the body's capacity to fight off infection. The fine particulates from coal plant pollution are implicated in lung cancer, emphysema and other lung diseases.

If we are to survive as a nation, we must take every opportunity to maximize renewable energy sources and end greenhouse gas emissions. Delaware must meet its responsibility to clean up our air. The old paradigm has been, "If we protect the environment, we'll threaten the economy." But when you read about the town of Bethany Beach needing more and more money each year to keep up with coastal beach destruction; that people in Delaware have some of the highest rates of cancer, cardiovascular disease and asthma in the nation; when insurance companies won't insure homes along the southern coast anymore; when you read about the higher percentages of autism in areas with high carbon pollution – these are the real costs we are paying to avoid change.

DPL must be compelled to change the old paradigm. On November 12, 1936, when the Germans threatened Europe, Winston Churchill warned the people: "The era of procrastination, of half measures, of soothing & baffling expedients, of delays, is coming to a close. In its place, we are entering a period of consequences."

From "An Inconvenient Truth," I learned scientists can determine atmospheric temperatures from examining CO2 molecules in glacial ice. They have plotted the earth's temperature for the last 650,000 years. Over the last 650,000 years, the ten hottest years have occurred since 1995. Glaciers in Antarctica are melting at record rates. We have entered the period of consequences.

We must act now to curtail greenhouse gases. We don't have three or five years to study, debate or wait for the right political moment. Build the wind project. Seize the competitive advantage for new business. Don't give it away to New Jersey, New York, Rhode Island, Massachusetts or South Carolina, all of which are moving toward offshore wind power. It would be deeply unethical not to do everything possible to curtail greenhouse gas emissions. The people are telling you this. Overwhelmingly, they say, "We will pay more for wind, because it is the right thing to do." You have the duty and obligation to act now. Please do something great for Delaware and the nation.

Patricia Gearity, PO Box 96, Harbeson, Delaware 19951

Sincerely yours.

Chow'r McKoo KN RH CC

Jennifer Davis, DE Office of Mgmt & Budget Russell T. Larson, Office of the Controller General Charlie T. Smisson, Jr., The DE Energy Office Arnetta McRae, DE Public Service Commission

RECEIVED 07 APR -5 PM12: 27 DELAWARE P.S.C.

Dear Sirs/Madams:

The following letter was sent via e-mail to Gov. Minner and Ms. Nickerson on Wednesday, January 17, 2007. I am forwarding it to you for your information:

Dear Governor Minner and Ms. Nickerson,
I was recently made aware of the issues regarding air quality in Sussex County. As a resident of the county with young children, I am very concerned about the rating of our air as among the worst in the nation by the American Lung Association. This really hit home with me because 4 out of the 5 children in my son's carpool receive regular nebulizer treatments to help their breathing. These are 5 year olds that I'm talking about.

I feel strongly that every effort must be made to ensure that the air we breathe is as clean as it can be. From what I understand, a major source of air pollution in our area is the Indian River Power Plant (owned by NRG). NRG is fighting DNREC's new regulations to limit toxins emitted by the power plant. If this state can organize all of the restaurants and bars to ban cigarette smoking, how can we allow NRG to fight against a continuation of those same efforts towards cleaner air?

I also hope that serious consideration is being given to the Blue Water Wind proposal for a wind farm in the county. This certainly sounds like a viable alternative that can benefit Delaware by providing affordable energy and cleaner air.

Our children get plenty of things from us that they don't need (Nintendo, iPods, toys, toys, toys); the least we can do is be sure they get what they truly need - clean air to breathe. Thank you very much for your time and consideration of my thoughts.

Sincerely,
Lily Gosnear
149 Glade Circle West
Rehoboth Beach, DE 19971
lgosnear@yahoo.com

Perry Hood Comment – April 9, 2007

From: Perry Hood [mailto:phood@verizon.net]

Sent: Monday, April 09, 2007 8:55 AM

To: Nickerson Karen J (DOS)

Subject: Comment on Independent Consultant Final Report

To the Delaware Public Service Commission Commissioners:

Ref: PSC DOCKET NO. 06-241 pp 39-40

The point allocation system still does not properly address the requirements of Electric Utility Retail Customer Supply Act of 2006, therefore it should be revised to reflect that price stability is more important than price. My suggestion would be the following: Price 20 points; Price Stability 33 points. This represents a reversal of the current allocation of points, in accordance with the fulfillment of all the requirements of the aforementioned Act.

I base my request on the following quotation from the Act: The Act states that the Proposed RFP shall "set forth proposed selection criteria based on the cost-effectiveness of the project in producing <u>energy price stability</u>, reductions in environmental impact, benefits of adopting new and emerging technology, siting feasibility and terms and conditions concerning the sale of energy output from such facilities."

Perry Hood 4 Flamingo Court Lewes, DE 19958

302-644-8835 (H)

PECE/ Privill Pond Dr.

07 APR -3 Selbyville, DE 19975

DELAWARE P.S.C.

Ms. Arnetta McRae Chair Delaware Public Service Commission 861 Silver Lake Boulevard, Suite 100 Dover, DE 19901

Dear Ms. McRae,

Like so many other residents of Sussex County, I have spent many hours in meetings and reading about what should be done to answer our energy needs for the next generation. As members of Delaware's committee to make the decision about which, if any, of the proposals to accept, you have invested a great amount of time in studying the alternatives. Please accept the charge you have been given, and select from the bids rather than defer this decision to a later time.

Delmarva Power Company has proposed rejecting all bids and the "continued reliance on the recently updated SOS bidding process". This is the same company whose president told Delaware customers only a year ago: "Delmarva Power cannot control the fuel prices that are driving these increases in electricity rates." At the same time, he announced a 59 percent increase after six-year price freeze. During those six years, according to President Stockbridge, the cost of coal increased 150 percent, and natural gas increased 400 percent.

Given the reality of global warming and the prospect of carbon taxes, the cost of fossil fuels can only go up in the years ahead. The people of Delaware have additionally paid a high price in human suffering from elevated rates of respiratory disease and cancer, that are documented by the health department - as well as the testimony of those attending the many hearings you have conducted.

The offshore wind power proposal offers a fresh approach for Delaware and, indeed, the nation. Not many states have this opportunity, and it will not likely come our way again for a long time.

You have the power to make this decision for all of us. You have all the information you need. Please make your decision soon, and make it wisely.

Sincerely yours,

David Jaeger

Willett Kempton Comment

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF DELAWARE

PSC DOCKET NO. 06-241
REVIEW AND APPROVAL OF THE REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF NEW
GENERATION RESOURCES UNDER 26 DEL. C. § 1007(d)

Written submission of oral comment to PSC by Willett Kempton, 12 March 2007. Public Hearing, Del. Tech, Jack F. Owens Campus Theatre, Georgetown, DE

Willett Kempton:

Thank you. We heard earlier this evening that academics do not work for a living and that academics and activists are trying to put people out of work. I'm an Associate Professor at the University of Delaware, so that makes me an academic. I'd like to correct the record on that point. During the last year or more, I've been working at least 60 hours a week. And a large fraction of my efforts are on developing new technologies that would bring new jobs and new businesses to Delaware.

My next comments are directed to the plant workers who have turned out and spoken tonight.

Your loyalty to your employer is admirable. I appreciate that you and those who came before you have provided power to Delaware for over 50 years. When I use electricity in Newark, often some of that electricity comes from the Indian River power plant, and I am grateful that you have been providing it. I also would like to acknowledge the plant workers who testified earlier of their efforts to comply with pollution regulations, including voluntary reporting.

When that plant was built, no one knew the health costs of power production. And when we did learn about those costs, we couldn't just shut down the plant overnight because we need the electricity. The plant workers do not deserve blame for the health consequences. But I hope that the plant workers can still hear the voices of the victims of pollution who have testified today. They have borne significant costs, both in health care and impact on their lives. Many of the statistics, and personal reports we heard today are troubling.

The question before the PSC is not "coal versus no jobs". Wind power creates about 1 and ½ jobs per MWh as does coal power. And even if the wind facility is built, that won't cause coal plant closure—wind is a fluctuating resource and will still need some backup power from existing generators. The proposed 600 MW wind project would use only 3% of Delaware's offshore wind resource, so the possibilities of expansion are much

greater than for coal or natural gas. Thus, beyond the one plant we contemplate today there are the possibilities of many more jobs ultimately from Delaware Wind than there could be in burning coal.

For my remaining comments, I would like to address the Commission and Agencies.

First, thank you to the Commissioners and Mr Cherry to coming out in person to hear the public.

I appeal to you tonight—pick a bid. Don't turn the decision back to the legislature. I think that you and Commission Staff can do a better job at evaluating these proposals than the Legislature.

Let me address the question: 'Is a higher bid price fair to standard offer service (SOS) customers?' The figures about increased price for SOS customers are relative to a 'base price', but that base price appears to be too low; for example, it is much lower than the energy price reported on bills by Delmarva, and the difference is much greater than ancillary service costs. But let's assume that the base price is correct. After correcting an arithmetic error in computing bill impact, the average SOS customer would pay a premium of less than \$5/month for wind power. Based on our survey of Delmarva customers, 89% say they would prefer their electricity to come from wind rather than coal or natural gas, even if it costs over \$10 more per month. SOS customers want it. On what basis would they be told they are not allowed to?

What is the cost of delay? Each year 95 Delaware residents die from the effects of particulates from power plants. Because the wind facility would be throttling down power production from fossil plants from day one of operation, we can calculate the approximate health benefit from installing the proposed wind facility. I will provide my calculations for the record. Each year of delay will cost the lives of 11 Delawarians from particulates. There are additional health impacts associated with asthma, cancer, and other illnesses. So there are real costs in human health to delaying a decision.

Thank you.

LEAGUE OF WOMEN VOTERS OF DELAWARE 2400 W. 17TH STREET, CLASH WING, ROOM 1 LOWER LEVEL WILMINGTON, DE 19806-1311

March 21, 2007

Attn: PSC Comment in Dckt. 06-241
Public Service Commission
861 Silver Lake Boulevard
Cannon Building, Suite 100
Karen.Nickerson@state.de.us
Robert.Howatt@state.de.us
Russell.Larson@state.de.us
Jennifer.Davis@state.de.us
John.Hughes@state.de.us

From Letitia L. Diswood and Christine L. Stillson, Co-presidents League of Women Voters of Delaware Letty.diswood@verizon.net clstillson@verizon.net

The following comments by the League of Women Voters of Delaware on the evaluation of bids in response to Delmarva's RFP for long term power procurement are in addition to our statement entered into the record at the public meeting in Dover on March 6, 2007.

Since the earliest stages of the RFP process, we have been concerned primarily about two issues. The first is that the assignment of points for evaluation of bids seems to be inconsistent with the intent of the Electric Utilities Retail Customer Supply Act of 2006 (EURCSA). In our view too many points were assigned to price relative to price stability, reductions in environmental impact, and the other items listed in EURSCA.

Based on the assignment of points alone, it is not surprising that a small conventional gas-fired plant would lead in the evaluations, despite the fact that one of the major factors leading to the development of EURSCA was a significant increase in electric rates due to unexpected increases in the cost of natural gas. The impact of the initial allocation of points was further enhanced by the scoring methods used in ranking the bids. The approach used for "price" and "price stability" accentuated the importance of a bid winning those categories. In the environmental category, especially because of the scaling used for air emissions, the bids were more tightly ranked. The practical result was to diminish still further the importance of a bid having good environmental characteristics relative to a bid having a low cost.

Our second concern has been that the future costs of carbon dioxide emissions might not be fully considered in the evaluations. Potential costs have been considered, but it is not clear that the estimated costs are high enough, especially since the trend toward

eliminating greenhouse gases is likely to increase as a result of the recently released report by the Intergovernmental Panel on Climate Change. This issue was raised by the Independent Consultant in his evaluation. It is hoped that as the process proceeds, the Independent Consultant and DNREC will investigate this in detail and reach a consensus as to the appropriate values to use.

During the RFP process, the Independent Consultant worked closely with Delmarva to develop the point scoring system and in evaluating the bids, including using the same proprietary computer models. While this is understandable given the tight schedule and the desire for consistency, it is expected that the Independent Consultant will be able to move away from this approach and use other new and more independent resources as the bids move into the IRP process.

Our comments on Delmarva's initial IRP have been submitted separately, and we do not wish to dwell on them here. However, since Delmarva's bid evaluation devoted considerable time to arguing that all the bids should be rejected based on the initial IRP, we feel it important to restate our position. It is our view that the initial IRP does not adequately address either the intent or letter of EURSCA. The use of rolling three year purchase contracts is a short term strategy that leaves Delaware rate payers fully exposed to the effects of continuously increasing costs of energy and environmental impacts. Unfortunately, this short term mindset appears to have spilled over into the bid evaluation process. It is our view that what Delaware does with respect to the bids for new electrical generation should be part of a long range plan to meet the needs of Delaware citizens. That plan needs to take into full account all the considerations enumerated in EURSCA, including price, price stability, and environmental impact, especially the reduction of greenhouse gases and other pollutants.

Regarding the RFP/IRP process as it moves forward, the League of Women Voters of Delaware as a matter of policy will not make a commercial recommendation for one company or bidder. However, the choices before the State relate directly to our policies, and we respectfully request that the PSC and the other state agencies involved give due consideration to our position. The League strongly opposes any new electrical power generation for Delaware that increases greenhouse gases or other pollutants. Neither does it support purchasing additional fossil fuel-generated power from other states as a substitute for building clean power generation in Delaware. In addition to environmental issues, the use of fossil fuels will only become more expensive as exploration, extraction, transportation and environmental impact costs continue upward. The League favors conservation, increased energy efficiency, price stabilization and a transition as soon as possible to renewable energy sources. Conservation efforts are by far the most cost effective and should receive first attention. However, conservation alone is likely to be insufficient as Delaware continues to grow. Although customer-sited renewable energy sources such as solar panels have a role to play, large scale renewable resources will probably be required. Both would help reduce the need to use fossil fuel-generated power from the grid while helping Delaware meet statutory requirements for renewable energy. Of the utility scale renewable resources available, wind power is the most commercially advanced. It is a zero-pollution option with no greenhouse gas or toxic air

emissions; no impacts or energy consumption from extracting, transporting, or storing fuel; no cooling water impacts; no water pollution or solid waste; and, if properly sited, negligible effect on wildlife.

David Lurty Comment - April 6. 2007

From: Nancy & David Lurty [mailto:lurtys@prugallo.com]

Sent: Friday, April 06, 2007 9:37 PM

To: Nickerson Karen J (DOS) **Cc:** Lurtys@prugallo.com

Subject: fw: Re: Today is Deadline for Public Comments to PSC

Ms. Arletta McRae Chair of Public Service Commission

Dear Ms. McRae

I am David Lurty. I live at 26 Ocean Breeze Drive, Rehoboth Beach, Delaware 19971. I support Wind Energy. Please do everything you can to make it successful alternative for Delaware Energy Solutions. I understand that a long term committment will be needed to allow the company proposing Wind Energy to get the financial backing they need. Please help them get a long term commitment. It is time that we as a people begin making the long term commitments we need to protect the planet.

Please don't support coal and gas solutions because it is easier to do. Because it is more comfortable and seemingly safe. These solutions make our country more vunerable to other peoples and counties that don't like us, put more polution in the air that effects our health and heats up our planet so that the very geography that we live on will be changed if we don't work to correct our transgressions with energy sources.

Sincerely,

David Lurty

Hi, Dave, mail to: karen.nickerson@state.de.us

She's the secretary of the Commission. Ask her to file your comment in the public record for the Delmarva RFP, and distribute your email to all commissioners. You can address your email to Ms. Arletta McRae, Chair, Public Service Commission

Thanks for your support. Sorry this took awhile. I am on the road out of state. You can still send in your comments tonight. And/or come to the public hearings next week and let them know what you think. More info is at:

http://www.depsc.delaware.gov/electric/dplirp/0314publicnotice.pdf

Best regards, Pat

Steph Smith Comment - March 21,2007

From: StephSmith1000@aol.com [mailto:StephSmith1000@aol.com]

Sent: Wednesday, March 21, 2007 3:43 PM

To: Davis Jennifer (OMB); Larson Russell T (LegHall); Smisson Charlie T. (DNREC); Nickerson Karen J

(DOS); senator@biden.senate.gov; Feedback (MailBox Resources); Bunting George (LegHall);

gsimpson@udel.edu; Booth Joseph (LegHall); Hocker Gerald (LegHall)

Subject: Alternative Energy-PRO WIND FARMS

Dear Loyal Servers of your Constituents,

I have read the initial surveys that the majority of those polled in Sussex County and Delaware approve of exploring alternate sources of power from wind farms. I am one of them. I also see this effort as accepting the inevitable instead of delaying it. At this point all well-read citizens are at least aware of the climate crisis and the deteoration of the places we so dearly love. Be part of that positive change, put yourself in the category of the front-runner for this change. A beautiful state like Delaware deserves smart, innovative, and forward-thinking choices and government to back it up.

I support Wind Farms!

Please represent me well.

Steph Smith

Milton, DE

RECEIVED

07 MAR 21 AMIT 03

Bruce Burcat, Executive Director
DE. Public Service Commission LAWARE P.S.C.
861 Silver Lane Blvd.
Cannon Bldg., Suite 100
Dover, DE 19904

Dear Mr. Burcat.

I want to thank you once again for attending the public hearing in Georgetown on 3/5/07. I do realize these hearings have kept you very busy. At that hearing I am sure you noticed the only people supporting the NRG proposal were employees of the Indian River power plant or members of the plumber / pipe fitter trade union. Oh, and the representative from the Norfolk / Southern RR. discussing the advantages to his business if we continue to pollute our environment with their coal. All of these people are obviously concerned about keeping their current jobs to support themselves and their families. Although I do understand their concerns, their logic fails me and they are being very narrow minded and self serving. That plant is not shutting down any time soon (much to my dismay), even if we accept the Blue Water Wind proposal. I and the majority of speakers at that hearing, support the Blue Water wind proposal to the point that it is a "NO BRAINER" to me!!! There is no such thing as clean coal. Why invest in more coal burning technology when we are well aware of its negative impact on the environment and people's health, not to mention the mountain removal process to obtain the coal. There has been no indication of price stability for electricity using coal. Delaware needs to step up and lead this nation in clean renewable sources of energy. Studies indicate off shore Delaware as an ideal location for a wind mill farm. It may be new technology to us, but it has proven to be very successful elsewhere. I do not understand why the trade unions do not see that there will be plenty of new jobs available. The wind mill proposal will require a lot of local resources and technology and provide numerous jobs to the area. Broader minded people are looking at environmental and health issues for the nation and the planet. Please, please do not kick this back to the legislature. SUPPORT WIND MILL POWER NOW and get this ball rolling. We do not have time to waste, we need to ACT NOW.

Sincerely,

Gloria J. Walls 34 Lake Ave.

Rehoboth Beach, DE 19971